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This listing of claims will replace all prior versions, and listings, of claims in the application.

**PATENT** 

### **Listing of Claims:**

### 1. (withdrawn) A compound of formula I:

$$\begin{bmatrix} R^{1} & R^{3} \\ N & R^{4} \end{bmatrix} \bullet n(R^{6}CO_{2}H)$$

$$R^{2} \qquad R^{5}$$

$$I$$

wherein:

is

R<sup>1</sup> and R<sup>2</sup> are each independently alkyl or -(alkylene)-epoxyethyl;

R<sup>3</sup> is alkyl, aralkyl, or aryl, wherein said alkyl, aralkyl or aryl is optionally substituted with 0-5 Z;

R<sup>4</sup> and R<sup>5</sup> are each independently H, alkyl, or aryl, wherein said alkyl or aryl optionally substituted with 0-5 Z;

R<sup>6</sup> is H, alkyl, aryl or aralkyl;

Z is:

R<sup>7</sup> and R<sup>8</sup> are each independently H, alkyl, or aryl;

R<sup>9</sup> and R<sup>10</sup> are each independently alkyl or -(alkylene)-epoxyethyl;

j is the integer 0 or 1;

n is a number in the range from about 0.8Y to about Y; and

Y is the number of amine nitrogen atom equivalents in said compound;

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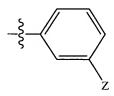
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provided that at least two of  $R^1$ ,  $R^2$ ,  $R^9$  and  $R^{10}$  are -(alkylene)-epoxyethyl.

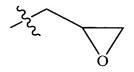
2. (withdrawn) The compound of claim 1, wherein R<sup>3</sup> is phenyl, optionally substituted with

0-5 Z.

3. (withdrawn) The compound of claim 1, wherein R<sup>3</sup> is:



- 4. (withdrawn) The compound of claim 1, wherein  $R^7$  and  $R^8$  are each H and wherein Z is  $-CH_2NR^9R^{10}$ .
- 5. (withdrawn) The compound of claim 4, wherein at least two of R<sup>1</sup>, R<sup>2</sup>, R<sup>9</sup>, and R<sup>10</sup> are:



6. (withdrawn) The compound of claim 4, wherein each of R<sup>1</sup>, R<sup>2</sup>, R<sup>9</sup>, and R<sup>10</sup> is:



- 7. (withdrawn) The compound of claim 1, wherein said compound is substantially water soluble.
- 8. (withdrawn) The compound of claim 1, wherein R<sup>3</sup> is cyclohexyl.

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9. (withdrawn) The compound of claim 1, wherein -(alkylene)-epoxyethyl is:

10. (withdrawn) A compound of formula II:

$$\begin{bmatrix} R^{1} & H & R^{3} \\ R^{0} & N_{+} & (alkylene)_{j} & R^{4} \end{bmatrix}$$
II

wherein:

is

 $R^1$  and  $R^2$  are each independently alkyl or -(alkylene)-epoxyethyl;

 $R^3$  is alkyl, aralkyl, or aryl, wherein said alkyl, aralkyl or aryl is optionally substituted with 0-5 Z;

R<sup>4</sup> and R<sup>5</sup> are each independently H, alkyl, or aryl, wherein said alkyl or aryl optionally substituted with 0-5 Z;

R<sup>6</sup> is H, alkyl, aryl or aralkyl;

Z is:

R<sup>7</sup> and R<sup>8</sup> are each independently H, alkyl, or aryl;

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R<sup>9</sup> and R<sup>10</sup> are each independently alkyl or -(alkylene)-epoxyethyl;

j is the integer 0 or 1;

provided that at least two of R<sup>1</sup>, R<sup>2</sup>, R<sup>9</sup> and R<sup>10</sup> are -(alkylene) epoxyethyl.

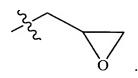
- 11. (withdrawn) The compound of claim 10, wherein  $R^3$  is phenyl, optionally substituted with 0-5 Z.
- 12. (withdrawn) The compound of claim 10, wherein R<sup>3</sup> is:

13. (withdrawn) The compound of claim 10, wherein Z is:

and wherein R<sup>7</sup> and R<sup>8</sup> are each H.

14. (withdrawn) The compound of claim 13, wherein at least two of R<sup>1</sup>, R<sup>2</sup>, R<sup>9</sup>, and R<sup>10</sup> are:

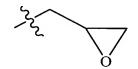
15. (withdrawn) The compound of claim 13, wherein each of R<sup>1</sup>, R<sup>2</sup>, R<sup>9</sup>, and R<sup>10</sup> is:



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- 16. (withdrawn) The compound of claim 10, wherein said compound is substantially water soluble.
- 17. (withdrawn) The compound of claim 10, wherein R<sup>3</sup> is cyclohexyl, wherein said cyclohexyl is optionally substituted with 0-3 Z.
- 18. (withdrawn) The compound of claim 10, wherein -(alkylene)-epoxyethyl is:



- 19. (withdrawn) The compound of claim 10, wherein said compound is substantially water soluble.
- 20. (currently amended) A polyepoxy resin composition comprising a compound of formula III:

$$R^{1}$$
 $N$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{2}$ 
 $R^{5}$ 
III

wherein:

R<sup>1</sup> and R<sup>2</sup> are each independently alkyl or -(alkylene)-epoxyethyl;

R<sup>3</sup> is alkyl, aralkyl, or aryl, wherein said alkyl, aralkyl or aryl is optionally substituted with 0-5 Z;

 $R^4$  and  $R^5$  are each independently H, alkyl, or aryl, wherein said alkyl or aryl optionally substituted with 0-5 Z;

Z is:

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R<sup>7</sup> and R<sup>8</sup> are each independently H, alkyl, or aryl;

R<sup>9</sup> and R<sup>10</sup> are each independently alkyl or -(alkylene)-epoxyethyl;

j is the integer 0 or 1;

### water

provided that at least two of R<sup>1</sup>, R<sup>2</sup>, R<sup>9</sup> and R<sup>10</sup> are (alkylene) epoxyethyl; and a carboxylic acid;

wherein the carboxylic acid is HCO<sub>2</sub>H or alkyl-CO<sub>2</sub>H, said alkyl optionally substituted with halo, alkoxy, monohaloalkoxy, polyhaloalkoxy, alkyl, aralkyl, aryl, hydroxyl (-OH), nitro (-NO2), cyano (-CN), sulfonyl (-SO2R4), sulfamovl (-SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>), or amino (-NH<sub>2</sub>, NHR<sup>5</sup>, NHR<sup>6</sup>, N(R<sup>5</sup>R<sup>6</sup>);

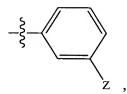
# provided that at least two of R1, R2, R9 and R10 are -(alkylene) epoxyethyl.

- 21. (original) The composition of claim 20, wherein the ratio of carboxylic acid equivalents to amine equivalents of the compound of formula III is at least about 0.8.
- 22. (original) The composition of claim 21, wherein said ratio is within the range of about 0.8 to about 5.
- (original) The composition of claim 21, wherein said ratio is within the range of about 23. 0.8 to about 2.
- 24. (original) The composition of claim 21, wherein said ratio is within the range of about 0.8 to about 1.5.
- 25. (original) The composition of claim 20, wherein said aryl is: Page 7 of 16

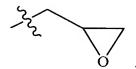
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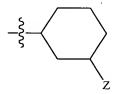
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wherein  $R^7$  and  $R^8$  are each H, wherein Z is -CH<sub>2</sub>NR<sup>9</sup>R<sup>10</sup>, and wherein each of  $R^1$ ,  $R^2$ ,  $R^9$ , and  $R^{10}$  is:



- 26. (original) The composition of claim 20, wherein said composition is substantially water soluble.
- 27. (cancelled).
- 28. (original) The composition of claim 25, wherein said composition is substantially water soluble.
- 29. (cancelled).
- 30. (previously presented) The composition of claim 22, wherein R<sup>3</sup> is:



- 31. (original) A coating produced from a mixture comprising: the polyepoxy resin composition of claim 20; and a curative.
- 32. (original) The coating produced of claim 31, wherein said carboxylic acid is acetic acid.

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(original) The coating produced of claim 31, wherein the compound of formula III of 33. said polyepoxy resin is:

(original) The coating produced of claim 33, wherein said formula III compound is: 34.

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35. (original) The coating produced of claim 33, wherein said formula III compound is:

- 36. (original) The coating produced of claim 34, wherein said carboxylic acid is acetic acid.
- 37. (original) A kit for forming a coating produced from a mixture comprising the polyepoxy resin composition of claim 20.
- 38. (cancelled).
- 39. (original) The kit of claim 37, further comprising a curative.
- 40. (original) The kit of claim 37, wherein the carboxylic acid is acetic acid.
- 41. (original) The kit of claim 37, wherein the compound of formula III is:

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#### 42. (original) The kit of claim 41, wherein said formula III compound is:

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## 43. (original) The kit of claim 41, wherein said formula III compound is:

- 44. (withdrawn) A method for making a polyepoxy resin water soluble, comprising: contacting said resin with a carboxylic acid.
- 45. (withdrawn) The method of claim 44, wherein said carboxylic acid is water soluble.
- 46. (withdrawn) The method of claim 44, wherein said carboxylic acid is acetic acid.
- 47. (withdrawn) A compound of formula IIA:

$$R^{7}$$
 $R^{8}$ 
 $R^{7}$ 
 $R^{8}$ 
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 

wherein:

t is 1, 2, 3, 4, 5, or 6;

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t' is 1, 2, 3, 4, 5, or 6;

R<sup>7</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>8</sup> are each independently H, alkyl, or aryl;

 $R^9$ ,  $R^{9'}$ ,  $R^{10}$ , and  $R^{10'}$  are each independently alkyl or -(alkylene)-epoxyethyl; and Z is the anion of a weak acid.

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- 48. (withdrawn) The compound of claim 47, wherein R<sup>7</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>8</sup> are each H, and t and t' are each 1.
- 49. (withdrawn) The compound of claim 47 wherein the six-membered ring is metasubstituted.
- 50. (withdrawn) The compound of claim 47 wherein the six-membered ring is phenyl.
- 51. (withdrawn) The compound of claim 47 wherein the weak acid is acetic acid.